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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/771,448	02/05/2004	Othmar Hayoz	032498-021	3827
21839 7590 10/03/2007 BUCHANAN, INGERSOLL & ROONEY PC POST OFFICE BOX 1404 ALEXANDRIA, VA 22313-1404			EXAMINER LAZORCIK, JASON L	
			ART UNIT 1731	PAPER NUMBER
			NOTIFICATION DATE 10/03/2007	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/771,448

Applicant(s)

HAYOZ ET AL.

Examiner

Jason L. Lazorcik

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 July 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 and 23-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 23-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

Submitted claim 22 (currently withdrawn) is directed to an invention that is independent or distinct from the invention originally claimed for the following reasons:

As previously indicated to the Applicant, MPEP 803 states:

"For purposes of the initial requirement, a serious burden on the examiner may be prima facie shown if the examiner shows by appropriate explanation of separate classification, or separate status in the art, or a different field of search as defined in MPEP § 808.02.

Claim 22 is drawn to an apparatus while elected invention in claims 1-9 is drawn to a method. Claim 22, which is currently at issue, is recognized as having a separate classification and separate status in the art from the elected invention and would necessitate divergent fields of search. Therefore, a concerted search for both inventions would constitute an unreasonable burden upon the Office.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 10-22 stand as withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the

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art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-9 and 23-25 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Applicants amended claim language requires that the dip tube is inserted into a mount wherein the mount is joined to a displaceably supported carriage. The claim further requires that a lower end of the dip tube is positioned with respect to a general "reference position". The Examiner has been unable to locate the antecedent basis for positioning the dip tube with respect to a general "reference position".

The Examiner has found in Applicants specification (§[0022]) for example that "The dip tube is inserted reproducibly, in terms of the position of its lower end, into a mount which is connected to a displaceably supported carriage". In view of the foregoing excerpt, the Examiner finds support for inserting a dip tube into a mount wherein said dip tube is "positioned with respect to a lower end of the dip tube" or alternately wherein said dip tube is "positioned with respect to a lower end of the mount". However, the specification as originally filed does not provide basis to position said dip tube with respect to any general "reference position" as presently claimed.

Claims 1-9 and 23-25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 sets forth the limitation in lines 14-15 whereby the "lower end position" is defined by means of an adjustment device and or a control device, and that said definition is "based on a previously-made assessment that the gob is suitable for processing". The "suitability" of a product is a subjective term which is open to interpretation. Therefore the claimed limitation, which requires judgment based upon a "previously-made assessment that the gob is suitable", is likewise open to subjective interpretation. It follows that the particular metes and bounds for which applicant is seeking patent protection are rendered unclear and indefinite.

Claim Rejections - 35 USC § 102

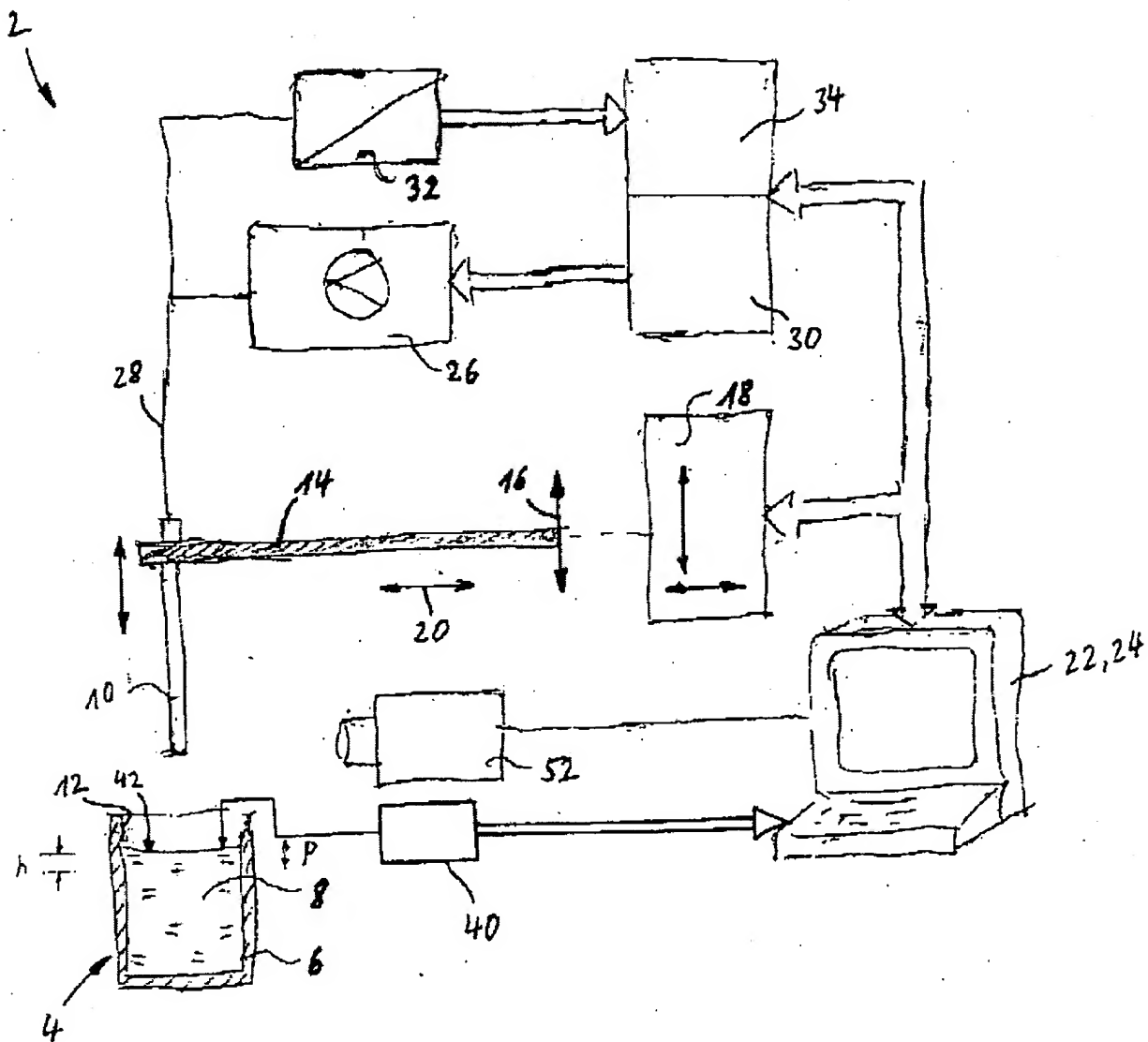
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 4, 7, and 8 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Auras (DE 101 16 075 – Note: US 2003/0056539 A1 is here utilized as an English language equivalent to the German document). With particular reference to the instant reference Figure 1 (excerpt presented below), Auras teaches a method for manufacturing a glass body whereby a "dip tube" (10) is inserted into a mount (14) joined to a displaceably supported carriage (18). The reference teaches a means for adjusting the "lower end position" of the carriage which is predetermined in accord with

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the level of molten glass remaining in the melting pot (**Claim 2**). The dip tube is extended into the melt by lowering the carriage (18) to a lower position, and upon extraction from the melt, a molten gob of glass pulled from the melt by the dip tube is blown into the desired final shape of the glass body.

In the disclosed process (§ [0038]), both the lower end position of the carriage and the blowing pressure in the blowing step are controlled utilizing "an adjustment device and/or a control device" (e.g. a computer) as claimed (**Claims 7-8**) with feedback provided by an imaging system. Specifically the reference teaches that "repeated immersion and withdrawal of the immersion tube reduces the amount of the available molten glass" and that "the invention therefore proposes determining the position of the surface of the molten glass in the adjustment direction of the immersion pipe using techniques known per se" (§[0008]). The required positioning of the dip tube is monitored via an image recording device, and the image data is utilized in a "image processing device " in order to provide the appropriate automated control over the process (§[0026]). Additionally, the instant reference provides for an induction coil heater (§[0031]) which is understood to be guided towards at least a portion of the dip tube during the immersion operation and which thereby effectively heats the dip tube for a predetermined length of time (**Claim 4**).



Claims 3 and 23-25 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Auras (DE 101 16 075).

With respect to claim 3, Aura teaches that the coordinate system of the adjusting means (18) can be ascertained using contact sensors(see ¶[0037]). The disclosed “contact sensor” is understood to read upon the claimed “reference element” for positioning the dip tube. Although the instant reference does not explicitly indicate that

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the contact sensor is "extended", one of ordinary skill in the art would be fully equipped to select an appropriate contact sensor which actuates by the claimed extending motion.

With respect to claims 23-25, the Auras teaches that "a computer-aided control means for controlling the adjusting means for the immersion tube" is provided including means for determining the position of the surface of the molten glass. Auras further teaches that it is advantageous when the automated device is "an image recording device, e.g. in the form of a digital camera". Although the reference does not explicitly state that the positioning of the dip tube is monitored and controlled in response to images acquired by means of a camera, said video based control is understood as implicitly embodied in the instant disclosure.

Alternately should Applicant argue that said image assisted positioning of the dip tube is not taught by the reference, it is the Examiners position that such a modification would represent a trivial and obvious extension over the prior art teachings for one of ordinary skill in the art at the time of the invention. Specifically, Auras makes explicit reference to monitoring process variables with comparison to desired data values by use of a digital camera(see ¶ [0025-00026]). Absent any compelling and substantially unexpected evidence to the contrary, it would be a trivial matter to extend this video monitoring and control feature to other aspects of the process including automated positioning of the dip tube.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Auras (DE 101 16 075) as applied under 35 U.S.C. 102(b) to claim 1.

With respect to claim 6, Although the Auras reference is silent on the claimed feature of an automatically retractable "cover element", such an element would have been an obvious addition to the Auras disclosure for one of ordinary skill in the art at the time of the invention. A cover element or lid placed over the molten glass would be recognized by one of ordinary skill as an obvious approach to prevent escape of heat by convective or radiation processes from the surface of the molten glass.

Consequently, one of ordinary skill in the art would have been motivated to install such a cover element as an obvious means of reducing the utility costs associated with maintaining the glass in the molten state. Further, where the Auras process is directed

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towards a substantially automated procedure, one of ordinary skill in the art would have likewise found ample motivation to automate the cover element retraction in order to maintain a substantially automated process.

Claims 5 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Auras (DE 101 16 075) as applied under 35 U.S.C. 102(b) to claim 4 and claim 1, respectively, in further view of the teachings of Williams (US2,247,424).

Williams (US 2,247,424) relates a fundamental teaching in the art of gathering glass by means of a "punty" or gathering head. Specifically, the instant reference teaches that it is well known in the art of hand working glass to rotate the "punty" along the long axis of the device as well as to swing said device or "jiggle" it in an angle out of the vertical position. These actions are performed in order to maintain the uniformity of the glass charge on the punty or alternatively stated to prevent said charge from deforming and dropping off of the punty surface. One of ordinary skill in the art at the time of the invention would certainly have appreciated the functional similarity between the old techniques associated with gathering molten glass with the punty and gathering a glass gob with a dip tube as set forth in the instant application. Specifically, although the Auras reference is silent regarding imparting a rotating action to the dip tube, it would have been obvious to one of ordinary skill in the art to implement a rotating motion both during immersion of the dip tube as well as after withdrawal of the glass gob from the melt. This rotation action would have been an obvious addition to the Auras apparatus for anyone seeking to maintain a uniform gob on the tip of the dip tube. In light of the prior art as set forth above and absent any compelling and unexpected

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results to the contrary, the limitations set forth in claims 5 and 9 regarding rotating the mount and/or dip tube are insufficient to patentably distinguish the instant invention over the prior art as taught by Auras.

Response to Arguments

Applicant's arguments filed July 5, 2007 have been fully considered but they are not persuasive.

Applicant first acknowledges that Aura teaches "the replicable positioning of an immersion tube" into the molten glass. Applicant points to the disclosure in Aura wherein the immersion depth of the immersion tube is determined in response to a measured position of the liquid surface in relation to the tube holder or positioning device. Applicant then alleges that the claimed invention is distinguished over the prior art since it does not require determination of the level of molten glass.

Applicant specifically argues that, in the claimed invention, the immersion depth is determined based upon "assessment of the gob and/or the finished membrane" not upon a measured position of the liquid surface.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., immersion depth is based upon "assessment of the gob and/or the finished membrane") are not recited in the rejected claim(s). Although the claims are interpreted

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in light of the specification, limitations from the specification are not read into the claims.

See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Further, Applicant argues that the claimed invention does not require an active step of measuring the liquid surface as set forth in the prior art. By virtue of eliminating this step, Applicant argues that the claimed invention is patentably distinguished over the prior art reference. The Examiner strongly disagrees.

In response, Applicant is reminded that the present claim language reads as “a method for producing a glass body ... comprising.” and not “consisting of”. The transitional phrase “consisting of” excludes any element, step, or ingredient not specified in the claim. *In re Gray*, 53 F.2d 520, 11 USPQ 255 (CCPA 1931); *Ex parte Davis*, 80 USPQ 448, 450 (Bd. App. 1948) while the transitional phrase “comprising” is inclusive or open-ended and does not exclude additional, unrecited elements or method steps. See, e.g., *Mars Inc. v. H.J. Heinz Co.*, 377 F.3d 1369, 1376, 71 USPQ2d 1837, 1843 (Fed. Cir. 2004).

Finally, *Aura* teaches us that the immersion depth of the immersion pipe is precisely set in order to remove “a predetermined amount of molten glass” after “a certain dwell time” and that the removal of the tube from the glass is performed “a predetermined speed” at “a constant molten glass temperature” (see ¶ [0008]).

Applicant appears to allege that the immersion depth described in the *Aura* reference is

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determined in a "black-box" fashion with no regard to the suitability of the produced gob to subsequent processing steps. This argument is clearly flawed.

In contrast to Applicants allegations, Aura recognized that it is beneficial to control multiple variables in a "pre-determined" manner including the volume of glass removed, the temperature of the glass, and withdrawal speed of the gob from the furnace (see paragraph [0008]). Restated, it is evident from the above disclosure that Aura appreciated that the "suitability" of the glass gob for subsequent processing is dependent upon a multiplicity of variables. Aura explicitly states that the "immersion pipe is immersed to a certain predetermined immersion depth into the molten glass mass for removing a predetermined amount of molten glass via the immersion tube" (emphasis added). Since the amount of glass required is "predetermined" it is clear that the immersion depth is likewise "predetermined" through a "previously-made assessment" of the suitability of the volume glass gob.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason L. Lazorcik whose telephone number is (571) 272-2217. The examiner can normally be reached on Monday through Friday 8:30 am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on (571) 272-1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


STEVEN P. GRIFFIN
SUPERVISORY PATENT EXAMINER
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JLL